



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: October 2, 2008

RE: White River Storage Field / 125-26533-00045

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot12/03/07



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## **New Source Construction and Minor Source Operating Permit OFFICE OF AIR QUALITY**

**White River Storage Field  
8033 W. 350 N.  
Hazelton, Indiana 47640**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: 125-26533-00045	
Issued by/Original Signed By:	Issuance Date: October 2, 2008
Alfred C. Dumauval, Ph. D., Section Chief Permits Branch Office of Air Quality	Expiration Date: October 2, 2013

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary engine driven compressor station for natural gas distribution.

Source Address:	8033 W. 350 N., Hazelton, Indiana 47640
Mailing Address:	P.O Box 209, Evansville, Indiana 47708
General Source Phone Number:	(812) 492-6781
SIC Code:	4931
County Location:	Pike
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program
	Minor Source, under PSD
	Minor Source, Section 112 of the Clean Air Act
	Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary

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This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired Caterpillar G3412SITA class internal compressor, four-stroke rich-burn engine, using spark ignition and equipped with a catalytic converter as a control device, identified as ICE001, constructed in 2000, with a maximum capacity of 465 horsepower.
- (b) One (1) desulfurization (Sulfa Treat) unit to remove total reduced sulfur (TRS) via adsorption beds containing granular material. Gas purification occurs across the bed prior to combustion in the IC engine in order to extend equipment wear life, identified as DES001, constructed in 2000.
- (c) One (1) hydrate inhibitor using methanol with recovery and regenerations system, identified as GHI001, constructed in 2000.

## **SECTION B GENERAL CONDITIONS**

### **B.1 Definitions [326 IAC 2-1.1-1]**

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

### **B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]**

- 
- (a) This permit, 125-26533-00045, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

### **B.3 Term of Conditions [326 IAC 2-1.1-9.5]**

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Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

### **B.4 Enforceability**

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Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### **B.5 Severability**

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.6 Property Rights or Exclusive Privilege**

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This permit does not convey any property rights of any sort or any exclusive privilege.

### **B.7 Duty to Provide Information**

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- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

#### B.8 Certification

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

#### B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

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- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:  
  
Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, IN 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

#### B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of permits established prior to 125-26533-00045 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

**B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]**

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The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

**B.13 Permit Renewal [326 IAC 2-6.1-7]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
  - (1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the

document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

**B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]**

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- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

**B.15 Source Modification Requirement**

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A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

**B.16 Inspection and Entry  
[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

**B.18 Annual Fee Payment [326 IAC 2-1.1-7]**

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- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

**B.19 Credible Evidence [326 IAC 1-1-6]**

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For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

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The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
- (A) Asbestos removal or demolition start date;
- (B) Removal or demolition contractor; or
- (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-52 IGCN 1003  
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

### **Testing Requirements [326 IAC 2-6.1-5(a)(2)]**

#### **C.8 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

### **Compliance Requirements [326 IAC 2-1.1-11]**

#### **C.9 Compliance Requirements [326 IAC 2-1.1-11]**

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

## **Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]**

### **C.10 Compliance Monitoring [326 IAC 2-1.1-11]**

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

### **C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

### **C.12 Instrument Specifications [326 IAC 2-1.1-11]**

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

## **Corrective Actions and Response Steps**

### **C.13 Response to Excursions or Exceedances**

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- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or

- (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]**

**C.15 Malfunctions Report [326 IAC 1-6-2]**

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Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One (1) natural gas-fired Caterpillar G3412SITA class internal compressor, four-stroke rich-burn engine, using spark ignition and equipped with a catalytic converter as a control device, identified as ICE001, constructed in 2000, with a maximum capacity of 465 horsepower.
- (b) One (1) desulfurization (Sulfa Treat) unit to remove total reduced sulfur (TRS) via adsorption beds containing granular material. Gas purification occurs across the bed prior to combustion in the IC engine in order to extend equipment wear life, identified as DES001, constructed in 2000.
- (c) One (1) hydrate inhibitor using methanol with recovery and regeneration system, identified as GHI001, constructed in 2000.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### D.1.1 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) natural gas-fired internal compressor engine and its control device.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH**

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	White River Storage Field
<b>Address:</b>	8033 W. 350 N.
<b>City:</b>	Hazelton, Indiana 47640
<b>Phone #:</b>	(812) 492-6781
<b>MSOP #:</b>	125-26533-00045

I hereby certify that White River Storage Field is :

still in operation.

no longer in operation.

I hereby certify that White River Storage Field is :

in compliance with the requirements of MSOP 125-26533-00045.

not in compliance with the requirements of MSOP 125-26533-00045.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

**MALFUNCTION REPORT**  
**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**FAX NUMBER - 317 233-6865**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES?\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_, 100 TONS/YEAR CARBON MONOXIDE ?\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ?    Y        N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y        N

COMPANY: \_\_\_\_\_ PHONE NO. (    ) \_\_\_\_\_  
LOCATION: (CITY AND COUNTY) \_\_\_\_\_  
PERMIT NO. \_\_\_\_\_ AFS PLANT ID: \_\_\_\_\_ AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/20\_\_\_\_    \_\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/20\_\_\_\_    \_\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2

**Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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**Indiana Department of Environmental Management  
Office of Air Quality**

Addendum to the Technical Support Document (ATSD) for a  
Minor Source Operating Permit

<b>Source Background and Description</b>
--

<b>Source Name:</b>	<b>White River Storage Field</b>
<b>Source Location:</b>	<b>8033 W. 350 N., Hazelton, Indiana 47640</b>
<b>County:</b>	<b>Pike</b>
<b>SIC Code:</b>	<b>4931</b>
<b>Operation Permit No.:</b>	<b>M125-26533-00045</b>
<b>Permit Reviewer:</b>	<b>Marcia Earl</b>

On August 18, 2008, the Office of Air Quality (OAQ) had a notice published in the Press-Dispatch, Petersburg, Indiana, stating that White River Storage Field had applied for a Minor Source Operating Permit to operate an engine driven compressor station for natural gas distribution. The notice also stated that the OAQ proposed to issue a Minor Source Operating Permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

<b>Comments and Responses</b>
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On September 25, 2008, B. A. Laseke of GZA GeoEnvironmental, Inc. submitted comments to IDEM, OAQ on the draft Minor Source Operating Permit (MSOP).

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

**Comment 1:**

Section A.1 of the permit reports attainment status for Pike County. Pike County is PM<sub>2.5</sub> partial nonattainment area for Washington Township per U.S. EPA designation.

**Response to Comment 1:**

IDEM agrees that Washington Township within Pike County is classified as a nonattainment area for PM<sub>2.5</sub> as per U.S. EPA designation. The remainder of Pike County is classified as attainment for PM<sub>2.5</sub>. The location of White River Storage Field is in Clay Township and as per U.S. EPA designation is classified at attainment for PM<sub>2.5</sub>. Therefore, no changes were made as a result of this comment.

**Comment 2:**

Section A.2(a) of the permit, the description of the natural gas-fired Caterpillar engine should include that it is a "rich-burn" engine.

### Response to Comment 2:

Section A.2 Emission Units and Pollution Control Equipment Summary along with Section D.1 Emissions Unit Description will be changed as follows:

- (a) One (1) natural gas-fired Caterpillar G3412SITA class internal compressor, four-stroke **rich-burn** engine, using spark ignition and equipped with a catalytic converter as a control device, constructed in 2000, with a maximum capacity of 465 horsepower.

### Comment 3:

Section D.1(a), (b), & (c) list no facility identifications.

### Response to Comment 3:

White River Storage Field is a small facility with 3 emission units that are easily identifiable and any identification is helpful, therefore Section A.1 and Section D.1 will be changed as follows:

- (a) One (1) natural gas-fired Caterpillar G3412SITA class internal compressor, four-stroke rich-burn engine, using spark ignition and equipped with a catalytic converter as a control device, ~~with no facility identification~~, **identified as ICE001**, constructed in 2000, with a maximum capacity of 465 horsepower.
- (b) One (1) desulfurization (Sulfa Treat) unit to remove total reduced sulfur (TRS) via adsorption beds containing granular material. Gas purification occurs across the bed prior to combustion in the IC engine in order to extend equipment wear life, ~~with no facility identification~~, **identified as DES001**, constructed in 2000.
- (c) One (1) hydrate inhibitor using methanol with recovery and regeneration system, ~~with no identification~~, **identified as GHI001**, constructed in 2000.

### Comment 4, 5 and 6:

The partial value for PM/PM<sub>10</sub>/PM<sub>2.5</sub> does not account for condensable particulate matter. The Hazardous Air Pollutants (HAPs) are incorrect courtesy of the rich-burn vs. lean-burn characterization. Not all values are AP-42 and the table listed for AP-42 is incorrect.

The federal rule applicability determination overlooks the existing NSPS rule 40 CFR 60, Subpart JJJJ.

### Response to Comment 4, 5 and 6:

The calculations have been revised to reflect AP-42, table 3.2-3 and the methodology has been updated to reflect the correct table in AP-42 and what emissions factor are from AP-42 and what emission factors were provided by the source. (See attached calculation pages 1 through 3).

Pursuant to 40 CFR 60, Subpart JJJJ, manufacturers of stationary spark ignition (SI), internal combustion engines (ICE) with a maximum engine power less than or equal to 25 horsepower (HP) and manufactured on or after July 1, 2008 are subject to 40 CFR 60, Subpart JJJJ.

Manufacturers of stationary SI, ICE with a maximum engine power greater than 25 horsepower (HP) that are not gasoline fueled and are not rich-burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program are subject to 40 CFR 60, Subpart JJJJ.

White River Storage Field has a 465 horsepower (HP) rich-burn SI engine fueled by natural gas and was manufactured before July 1, 2008. Therefore, the compressor engine (ICE001) is not subject to 40 CFR 60, Subpart JJJJ and no changes were made to the permit as a result of this comment.

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed Minor Source Operating Permit (MSOP) can be directed to Marcia Earl at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0863 or toll free at 1-800-451-6027 extension 3-0863.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emission Summary**

**Company Name:** White River Storage Field  
**Address City Zip:** 8033 W. 350 N., Hazelton, Indiana 47640  
**Permit No:** M125-26533-00045  
**Reviewer:** Marcia Earl  
**Date:** July 2008

**Uncontrolled Emissions**

<b>Emission Units</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>CO</b>	<b>NOx</b>	<b>HAPs</b>
Natural gas-fired compressor engine	0.33	0.33	0.33	0.01	2.07	64.20	53.45	0.54
<b>Total</b>	0.33	0.33	0.33	0.01	2.07	64.20	53.45	0.54

**Controlled Emissions**

<b>Emission Units</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>CO</b>	<b>NOx</b>	<b>HAPs</b>
Natural gas-fired compressor engine	0.33	0.33	0.33	0.01	1.08	7.05	5.88	0.54
<b>Total</b>	0.33	0.33	0.33	0.01	1.08	7.05	5.88	0.54

**Appendix A: Emission Calculations**  
**Internal Combustion Engine (Rich Burn) - Natural Gas**  
**(>250 and <600 HP)**  
**Reciprocating**

**Company Name:** White River Storage Field  
**Address City IN Zip:** 8033 W. 350 N., Hazelton, Indiana 47640  
**Permit Number:** M125-26533-00045  
**Reviewer:** Marcia Earl  
**Date:** July 2008

**A. Emissions calculated based on heat input capacity (MMBtu/hr)**

Heat Input Capacity  
MM Btu/hr

3.94

Before Control	Pollutant						
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.0194	0.0194	0.0194	0.00059	3.09780	0.11970	3.72000
Potential Emission in tons/yr	0.33	0.33	0.33	0.01	53.45	2.07	64.20

After Control	Pollutant						
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.0194	0.0194	0.0194	0.00059	0.3410	0.0625	0.4087
Potential Emission in tons/yr	0.33	0.33	0.33	0.01	5.88	1.08	7.05

**Methodology**

Emissions factors (before control) for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and CO are based on AP-42 (Supplement F, 8/00), Table 3.2-3. Emission factors (before control) for NOx and VOC provided by the source and are greater than AP-42 emission factors. Emission factors (after control) for NOx, VOC and CO provided by the source.

$$\text{Emission (tons/yr)} = [\text{Heat input rate (MMBtu/hr)} \times \text{Emission Factor (lb/MMBtu)}] \times 8760 \text{ hr/yr} / (2,000 \text{ lb/ton})$$

**Appendix A: Emission Calculations**  
**Internal Combustion Engines (Rich Burn) - Natural Gas**  
**(>250 and <600 HP)**  
**HAPs**

**Company Name:** White River Storage Field  
**Address City IN Zip:** 8033 W. 350 N., Hazelton, Indiana 47640  
**Permit Number:** M125-26533-00045  
**Reviewer:** Marcia Earl  
**Date:** July 2008

Heat Input Capacity  
MM Btu/hr

3.94
------

Before Control	Hazardous Air Pollutants					
Emission Factor in lb/MMBtu	Formaldehyde 2.05E-02	Acetaldehyde 2.79E-03	Acrolein 2.63E-03	Methanol 3.06E-03	Benzene 1.58E-03	Toluene 5.58E-04
Potential Emission in tons/yr	3.54E-01	4.81E-02	4.54E-02	5.28E-02	2.73E-02	9.62E-03

After Control	Hazardous Air Pollutants					
Emission Factor in lb/MMBtu	Formaldehyde 2.05E-02	Acetaldehyde 2.79E-03	Acrolein 2.63E-03	Methanol 3.06E-03	Benzene 1.58E-03	Toluene 5.58E-04
Potential Emission in tons/yr	3.54E-01	4.81E-02	4.54E-02	5.28E-02	2.73E-02	9.62E-03

**Methodology**

Emission Factors before control are from AP-42, Table 3.2-3

Emission Factors after control are based on manufacturer's emission factors.

$$\text{Emission (tons/yr)} = [\text{Heat input rate (MMBtu/hr)} \times \text{Emission Factor (lb/MMBtu)}] \times 8760 \text{ hr/yr} / (2,000 \text{ lb/ton})$$

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit (MSOP)

#### Source Description and Location

**Source Name:** White River Storage Field  
**Source Location:** 8033 W. 350 N., Hazelton, Indiana 47640  
**County:** Pike  
**SIC Code:** 4931  
**Operation Permit No.:** M125-26533-00045  
**Permit Reviewer:** Marcia Earl

On May 13, 2008, the Office of Air Quality (OAQ) has received an application from White River Storage Field relating to an engine driven compressor station for natural gas distribution. This operation is an existing plant.

#### Existing Approvals

There have been no previous approvals issued to this source.

#### County Attainment Status

The source is located in Pike County (Clay Township).

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Basic nonattainment designated effective federally April 5, 2005, for Washington Twp. for PM <sub>2.5</sub> . The remainder of Pike County is unclassifiable or attainment effective April 5, 2005, for PM <sub>2.5</sub> .	

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Pike County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Pike County (Clay Township) has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub>

emissions, and the effective date of these rules was July 15<sup>th</sup>, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions until 326 IAC 2-2 is revised.

- (c) Other Criteria Pollutants  
Pike County has been classified as attainment or unclassifiable in Indiana for PM<sub>10</sub>, SO<sub>2</sub>, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

#### **Fugitive Emissions**

- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

#### **Background and Description of Unpermitted Emission Units and Pollution Control Equipment**

The source consists of the following unpermitted emission units:

- (a) One (1) natural gas-fired Caterpillar G3412SITA class internal compressor, four-stroke engine, using spark ignition and equipped with a catalytic converter as a control device, constructed in 2000, with a maximum capacity of 465 horsepower.
- (b) One (1) desulfurization (Sulfa Treat) unit to remove total reduced sulfur (TRS) via adsorption beds containing granular material. Gas purification occurs across the bed prior to combustion in the IC engine in order to extend equipment wear life, constructed in 2000.
- (c) One (1) hydrate inhibitor using methanol with recovery and regeneration system, constructed in 2000.

#### **“Integral Part of the Process” Determination**

The source made an internal determination before construction in 2000, that the one (1) natural gas-fired engine driven compressor was exempt from air constructing permitting per 326 IAC 2-1.1-3(d)(1) because it qualified as a de minimis registration. This determination was made using calculations from emissions after the pollution control device (catalytic converter).

The Permittee has submitted the following information to justify why the catalytic converter (CC) should be considered an integral part of the natural gas-fired compressor engine:

The air emission control system is a configuration of air-to-fuel (A/F) ratio control value (Altronic GCV and controller) and catalytic converter (CC). The catalytic converter (CC) resides integral to the engine in that the catalytic oxidation occurs before final exhaust to the atmosphere.

IDEM, OAQ has evaluated the information submitted and has determined that the catalytic converter (CC) should not be considered an integral part of the natural gas-fired compressor engine. This determination is based on the fact that the natural gas-fired compressor engine can function without the catalytic converter and that the catalytic converter (CC) is considered a pollution control device. Therefore, the permitting level will be determined using the potential to emit before the catalytic converter (CC).

**Enforcement Issues**

IDEM is aware that the one (1) natural gas-fired engine, one (1) desulfurization unit and the one (1) hydrate inhibitor has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

**Emission Calculations**

See Appendix A, pages 1 through 3 of this TSD for detailed emission calculations.

**Permit Level Determination – MSOP**

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.16
PM <sub>10</sub> <sup>(1)</sup>	0.16
PM <sub>2.5</sub>	0.16
SO <sub>2</sub>	0.01
NO <sub>x</sub>	53.50
VOC	2.07
CO	54.36

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM<sub>10</sub>), not particulate matter (PM), is considered as a "regulated air pollutant".

HAPs	Potential To Emit (tons/year)
Formaldehyde	0.90
Acetaldehyde	1.44E-02
Acrolein	2.25E-02
Methanol	0.11
Benzene	1.93E-03
Toluene	1.79E-03
<b>TOTAL HAPs</b>	<b>1.18</b>

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of NO<sub>x</sub> and CO are each less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other regulated criteria pollutants are less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A Minor Source Operating Permit (MSOP) will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

**PTE of the Entire Source After Issuance of the MSOP**

The table below summarizes the potential to emit of the entire source, reflecting the natural gas-fired compressor engine emissions after the pollution control device (catalytic converter).

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of MSOP (tons/year)								
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO	Total HAPs	Worst Single HAP
Natural gas-fired compressor engine	0.33	0.33	0.33	0.01	5.88	1.08	7.05	0.54	0.35 Formaldehyde
<b>Total PTE of Entire Source</b>	0.33	0.33	0.33	0.01	5.88	1.08	7.05	0.54	0.35 Formaldehyde
Title V Major Source Thresholds	NA	100	-	100	100	100	100	25	10
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM <sub>10</sub> ), not particulate matter (PM), is considered as a "regulated air pollutant".									

**Federal Rule Applicability Determination**

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standard (NSPS) (326 IAC 12 and 40 CFR 60) included in the permit for this source.
- (b) The requirements of the New Source Performance Standard for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants, 40 CFR 60.630, Subpart KKK, are not included in the permit. This NSPS applies to emission units located at "natural gas processing plants," which are defined in the rule as "any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products or both. No extraction or fractionation of natural gas liquids (such as ethane, propane, or butane) will be conducted at this source.
- (c) The requirements of the NSPS for Onshore Natural Gas Processing, 40 CFR 60.640, Subpart LLL, are not included in the permit, because this source is not defined as an "onshore natural gas processing plant."
- (d) The requirements of the NSPS for Standard of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII, are not included in this permit. The natural gas-fired compressor engine is a spark ignition unit. 40 CFR 60, Subpart IIII applies only to compression ignition internal combustion engines.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.
- (f) The requirements of the NESHAP for Oil and Natural Gas Production Facilities, 40 CFR 63.760, Subpart HH, are not included in the permit, because the source is not located at a natural gas production facility and does not contain a natural gas processing plant. Natural gas enters the source after the point of custody transfer. Therefore, the source falls under the natural gas transmission and storage source category, and not the Oil and Natural Gas Production category.

- (g) The requirements of the NESHAP for Natural Gas Transmission and Storage Facilities, 40 CFR 63.1270, Subpart HHH, are not included in the permit, because this source is not a major source of hazardous air pollutants (HAPs) as defined in 63.2
- (h) The requirements of the NESHAP for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63.6580, Subpart ZZZZ, are not included in the permit, because this source is not a major source of hazardous air pollutants (HAPs) as defined in 63.2.

#### Compliance Assurance Monitoring (CAM)

- (i) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

<b>State Rule Applicability Determination</b>
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The following state rules are applicable to the source:

- (a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))  
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))  
This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than two hundred-fifty (250) tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements are not applicable to this source.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (d) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 is not applicable to this source.
- (e) 326 IAC 5-1 (Opacity Limitations)  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
  - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

- (f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (g) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
The source is not located in any areas listed in 326 IAC 6-5-1. The fugitive particulate emissions are negligible. Pursuant to 326 IAC 6-5-7(d), this source is not subject to the requirements of 326 IAC 6-5.

#### Internal Combustion Compressor Engine

- (h) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
Internal combustion engines are not specifically identified in 326 IAC 6-3-2(b) through (d). Pursuant to 326 IAC 1-2-59, "Process weight; weight rate", states that liquid and gaseous fuels will not be considered as part of the process rate. Therefore, the one (1) natural gas-fired internal combustion compressor engine is not subject to 326 IAC 6-3. In addition, pursuant to 326 IAC 6-3-1(b)(1), the natural gas-fired internal combustion engine is exempt from 326 IAC 6-3; since the potential particulate emissions are less than 0.551 lbs/hr.
- (i) 326 IAC 7-1-1 (Sulfur Dioxide Emission Limitations)  
The potential SO<sub>2</sub> emissions from the natural gas-fired internal combustion compressor engine are less than ten (10) pounds per hour and twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 7-1.1 are not applicable to this source.
- (j) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
The natural gas-fired internal combustion compressor engine is not subject to 326 IAC 8-1-6, because the potential to emit (PTE) of VOCs is less than twenty-five (25) tons per year.
- (k) 326 IAC 9-1-1 (Carbon Monoxide Emission Limits)  
The natural gas-fired internal combustion compressor engine is not subject to 326 IAC 9-1-1, because there are no applicable emission limits for the source under 326 IAC 9-1-2.
- (l) 326 IAC 10-1-1 (Nitrogen Oxides Control)  
The natural gas-fired internal combustion compressor engine is not subject to 326 IAC 10-1-1, because the source is not located in Clark or Floyd counties.
- (m) 326 IAC 10-5-1 (Nitrogen Oxide Reduction Program for Internal Combustion Engines (ICE))  
The natural gas-fired internal combustion compressor engine is not subject to 326 IAC 10-5-1, because it is not a large NO<sub>x</sub> SIP Call engine and is not subject to NO<sub>x</sub> control under a compliance plan pursuant to 326 IAC 10-5-3.
- (n) 326 IAC 12 (New Source Performance Standards)  
See Federal Rule Applicability Section of this TSD.
- (o) 326 IAC 20 (Hazardous Air Pollutants)  
See Federal Rule Applicability Section of this TSD.

<b>Conclusion and Recommendation</b>
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Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on May 13, 2008.

The operation of this source shall be subject to the conditions of the attached proposed New Source Construction and MSOP No. 125-26533-00045. The staff recommends to the Commissioner that this New Source Review and MSOP be approved.

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed permit can be directed to Marcia Earl at the Indiana Department of Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0863 or toll free at 1-800-451-6027 extension 3-0863.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emission Summary**

**Company Name:** White River Storage Field  
**Address City Zip:** 8033 W. 350 N., Hazelton, Indiana 47640  
**Permit No:** M125-26533-00045  
**Reviewer:** Marcia Earl  
**Date:** July 2008

**Uncontrolled Emissions**

<b>Emission Units</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>CO</b>	<b>NOx</b>	<b>HAPs</b>
Natural gas-fired compressor engine	0.16	0.16	0.16	0.01	2.07	54.36	53.50	1.18
<b>Total</b>	0.16	0.16	0.16	0.01	2.07	54.36	53.50	1.18

**Controlled Emissions**

<b>Emission Units</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>CO</b>	<b>NOx</b>	<b>HAPs</b>
Natural gas-fired compressor engine	0.33	0.33	0.33	0.01	1.08	7.05	5.88	0.54
<b>Total</b>	0.33	0.33	0.33	0.01	1.08	7.05	5.88	0.54

**Appendix A: Emission Calculations  
Internal Combustion Engine - Natural Gas  
(>250 and <600 HP)  
Reciprocating**

**Company Name:** White River Storage Field  
**Address City IN Zip:** 8033 W. 350 N., Hazelton, Indiana 47640  
**Permit Number:** M125-26533-00045  
**Reviewer:** Marcia Earl  
**Date:** July 2008

**A. Emissions calculated based on heat input capacity (MMBtu/hr)**

Heat Input Capacity  
MM Btu/hr

3.94

Before Control	Pollutant						
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.0091	0.0095	0.0095	0.00059	2.21000	0.02960	3.51000
Potential Emission in tons/yr	0.16	0.16	0.16	0.01	38.14	0.51	60.57

After Control	Pollutant						
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.0194	0.0194	0.0194	0.00059	0.34	0.06	0.41
Potential Emission in tons/yr	0.33	0.33	0.33	0.01	5.88	1.08	7.05

**Methodology**

Emissions factors (before control) are based on AP-42 (Supplement F, 8/00), Table 3.2-15.

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] \* 8760 hr/yr / (2,000 lb/ton)

**Appendix A: Emission Calculations  
Internal Combustion Engines - Natural Gas  
(>250 and <600 HP)  
HAPs**

**Company Name:** White River Storage Field  
**Address City IN Zip:** 8033 W. 350 N., Hazelton, Indiana 47640  
**Permit Number:** M125-26533-00045  
**Reviewer:** Marcia Earl  
**Date:** July 2008

Heat Input Capacity  
MM Btu/hr

3.9

<b>Before Control</b>	<b>Hazardous Air Pollutants</b>					
	Formaldehyde	Acetaldehyde	Acrolein	Methanol	Benzene	Toluene
Emission Factor in lb/MMBtu	5.28E-02	8.36E-03	5.14E-03	2.50E-02	4.40E-04	4.08E-04
Potential Emission in tons/yr	9.02E-01	1.44E-01	2.25E-02	1.10E-01	1.93E-03	1.79E-03

<b>After Control</b>	<b>Hazardous Air Pollutants</b>					
	Formaldehyde	Acetaldehyde	Acrolein	Methanol	Benzene	Toluene
Emission Factor in lb/MMBtu	2.05E-02	2.79E-03	2.63E-03	3.06E-03	1.58E-03	5.58E-04
Potential Emission in tons/yr	3.54E-01	4.81E-02	4.54E-02	5.28E-02	2.73E-02	9.62E-03

**Methodology**

Emission Factors before control are from AP-42, Table 3.2-15,16

Emission Factors after control are based on manufacturer's emission factors.

$$\text{Emission (tons/yr)} = [\text{Heat input rate (MMBtu/hr)} \times \text{Emission Factor (lb/MMBtu)}] \times 8760 \text{ hr/yr} / (2,000 \text{ lb/ton})$$